

App No.:

Inventors:

Title:

09/009,802

Sean McCarthy

Novel CRSP-2 Protein...

FIG. 1A

30 90 190 50 187 70 110 130 150 487 170 547 307 367 427 607 ကိုင္သ ATG GAA TTA E GAG GCT H D GAC CCA TGT Н Д Σ 回 CTG CTG TCG GAG GTG AAC I ATC TCA I ATC CAG Ŋ Ø Z ß > GCA ACC BCG ACC TIT ATC IGC Ø Ø ပ H H ഥ GCG CIC AGC CIG GTC TGC ACC GAC ACC AAT Ø ы Н Ω S Z > U ACG GGA AAT ATG GAG ACC ည္ပည AAC TAC H 24 Σ × Ü H z Z 团 SCG ည္ဟ TTG GTG CAG IGI GGA CA S CAC Н Ø ပ Д > U H CTT GCT GAG AAA GAA GTT GGA AGC TTC Ø > ບ 回 K 闰 Ö ß Ŀ CGG CCC AAG GAG GAG CAC AGG S ACT AGC K М Н K ø E E ß 回 929 CAG CAG CAG ACG CAG S TCA AGA ည္ဟမ္မ AGT 0 Ø Ø K S K H ĸ ATG CCG ACG GAC GAC ည္သ GCA AAC GGC Σ Д H Ø Ω O Ē Ω GGCACGAGGGGGGGGGGGGGCGCAGAGCGGAG ည္ဟမ္မ TAC GAC AAA ACA AAC CAG CGG GAA Q æ Ω H 闰 M ACG GAG GCT AAC ACC ACC s AGC GAA TGC M z ပ E٠ 旦 H 闰 CCC ATG ACC ATA TAC TGC CIC GCT GAC Н $\mathbf{\Sigma}$ Ø ⋈ ပ ы Ω GIC CIG GAG AAG CIC GCT GGA ATG GCT Н ¥ н ø 回 Ö \mathbf{z} M 909 ATG ၅၁၁ GAA GAA AAT CAC GTG AGC Σ Д 回 Z > ß 回 H 909 AGG GAG CAC 399 GAA ATT TCT H ß ps; G 闰 ഥ Д 909 CAG ညည GCA TAT GAA ACA 999 GTT Ø > K × r Ø Д 团 H CIG AAG GAG GAG AGC CGA GGC ATC S Ċ 团 闰 ၁၅၁ GTC ATG GTT CGC CAC GAC > ρ4 Σ ы ĸ CTG FTTC GAG CCT GTG ACA GAG TGC ບ 闰 H > 딥

j. 1B

210 667	230 727	250	270	290 907	310 967	330 1027	350 1087	351 1090
N AAC	V GTG	D GAC	၁၅၅	9 9	V GTT	E	IATT	
D GAC	PCCT	L CTG	S AGT	V GTG	E	T ACT	e Gag	
c TGT	F	L	A GCC	F	Y TAT	L	GAA	.:25
I ATC	L CTG	R	c TGT	TACC	e Gag	s AGC	R AGG	•
TACC	L CTG	S	PCCT	P CCG	D GAT	R AGG	GGA	
9 999	ວອອ	A GCC	C TGC	K AAG	P CCC	e Gag	L CTG	
N AAT	R AGA	P CCC	R CGA	c TGC	V GTC	L CTG	L	
s AGC	Q CAG	D GAC	D GAC	v GTG	e Gag	D GAC	A GCA	
၁၅၅	F TTC	H	L TTG	Y TAT	R AGA	E	A GCT	
r Agg	A GCC	C TGC	A GCC	v GTG	P CCC	L CTG	A GCC	
TACC	C TGT	L	G GGA	L CTG	L CTG	e Gag	A GCC	
A GCC	C TGC	e Gag	D GAT	s AGC	L	Q CAG	A GCT	
M ATG	L	ဗ	CCT	H CAC	I ATC	R CGC	A GCG	
k aaa	9 9	EGAG	e Gag	s AGC	EGAG	V GTG	PCCT	
TACC	P	v GTG	L	H CAC	9 9	e Gag	EGAG	
C TGC	Q CAG	PCCC	e Gag	PCCC	D GAT	e Gag	L AGG	
H	C TGC	L	W TGG	Q CAG	Q CAA	M ATG	L	
G GGT	DGAC	PCCC	TACC	C TGC	DGAC	F	A GCG	
W TGG	R AGG	TACA	IATC	L CTC	R CGT	s AGC	M ATG	
v GTC	Q CAG	င 76C	L	L	S AGC	၁၅၅	e Gàg	* TAG

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FIG. 1C

2196 1248 1406 1485 1564 1643 1722 1801 1880 1959 2038 2117 1327 CAGTACTTAGGTAATTGTAGGGCGAGGATTATAAATGAAATTTGCAAAATCACTTAGCAGCAACTGAAGACAATTATCA **ACTETCCCTCTTTGGCAGTTGCATTAGTAACTTTGAAAGGTATATGACTGAGCGTAGCATACAGGTTAACCTGCAGAAA ACCAGGCTTCTTCCTACATCTTCTTCCCAGTAAGTTTCCCCTCTGGCTTGACAGCATGAGGTGTTGTGCATTTGTTCAG** CACCCCTGTCCAGATTATTGGCTGCTTTGCCTCTACCAGTTGGCAGACAGCCGTTTGTTCTACATGGCTTTGATAATTG TGCAAACATCAACCTGGCAAAAATGCAACAAATGAATTTTCCACGCAGTTCTTTCCATGGGCATAGGTAAGCTGTGCCT TCAGCTGTTGCAGATGAAATGTTCTGTTCACCCTGCATTACATGTGTTTTATTCATCCAGCAGTGTTCAGCTCTAC TTTCATCTGGTTGTGACTCTAAGCTCAGTGCTCTCTCCACTACCCCACACAGGCCTTGGTGCCACAAAAGTGCTCCCC aaaaggaagaatatgggattttttttttgaggcatgcacatctggaattaaggtcaaactaattctcacatcctcta **AAAGTAAACTACTGTTAGGAACAGCAGTGTTCTCACAGTGTGGGGGCAGCCGTCCTTCTAATGAAGACAATGATATTGAC** TTTGAGGGGAGAGATGGAAACAATGTGGAGTCTCCCTCTGATTGGTTTTGGGGAAATGTGGAAAAGAGAGGAGTGCCTGCTT

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FIG. 1D

2275 2433 2479 2354 **ACCACGTGGAGAAAATCAAACCGAGCAGGGCTGTGTGAAACATGGTTGTAATATGCGACTGCGAACACTGAACTCTACG** GCACATGATTGTATAAGCATGCTTTTCTTTGAGTTTTAAATTATGTATAACATAAGTTGCATTTAGAAATCAAGCATAA CCACTCCACAAATGATGTTTTCAGGTGTCATGGACTGTTGCCACCATGTATTCATCCAGAGTTCTTAAAGTT

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FIG. 2A

GAATTCGGCACGAGACGACGTGCTGAGCTGCCAGCTTAGTGGAAGCTCTGCTCTGGGTGGAGAGCACCTCGCTTTG

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148	28 208	48 268	68 328	88 388	108 448	128 508	148 568
999	S AGC	N AAT	ල ලලල	D GAT	D GAT	k Aag	TACT
L (CTG G(r Agg	C TGC	R CGT	N AAC	CAA	r Agg	R AGA
L J	I ATC	D GAC	C TGT	V GTG	EGAG	R AAA	L CTG
V J	N AAC	T ACG	T ACA	C TGT	D GAT	P CCC	C TGT
A GCC G	N AAC	DGAC	A GCT	L	L	CAA	S AGT
A 600	F	S TCT	C TGT	TACA	Q CAG	N AAC	E GAA
V GTG G	DGAC	L CTG	F TTC	9 99	r A gg	E	GG A
	L CTG	C TGC	PCCG	PCCT	E	Q CAG	E GAG
3G A'	V GTC	Q CAG	K AAG	C TGC	L TTA	v GTC	CAA
IGAA(L CTG	STCA	e Gag	C TGC	I ATA	PCCA	6 66 A
3GAT.	A GCT	၁၅၅	D GAT	M ATG	P CCA	H	k AAG
)ອວວວ	G GGA	K AAG	R CGC	A 3000	TACC	ტ ტეტ	r Agg
3 A GC(L CTG	R CGG	P CCC	D GAT	A GCA	T ACT	၁၅၅
CCAG	CCC	A GCC	CAG	R CGA	D GAT	T ACA	CAA
CCT	STCT	9 999	CTC	O CAG	E GAA	6 66A	s TCA
3GGA(c TGC	H	C TGC	C TGC	M ATG	E	R AAA
rgcīr	L	L CTG	F	r Agg	T ACG	A GCA	k Aag
M GTGACGCACAGTGCTGGGACCCTCCAGGAGCCCCGGGATTGAAGG ATG	W TGG	D GAC	K AAG	R AGG	TACT	H	I ATT
/CGC/	s AGC	A GCT	R AGA	ж С66	C TGT	TACA	SAGT
GTG2	L	S TCT	T ACC	L TTG	V GTT	၁ ၁၅၅	CCA

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FIG. 2B

168 628	188 688	208 748	225 799	
P CCA	PCCA	s Agc		
k Aag	A GCT	TACC		
C TGT	CAA	L TTG		
I Att	A GCT	CAA	* Taa	
K AAA	TACT	S AGC	L CTA	
T ACG	DGAC	R CGA	K AAG	
W TGG	K AAA	c TGT	E	
F TTT	H	L CTG	I ATA	
H	<u>ე</u>	L	K AAA	* * * *
R CGT	R AGA	G GGA	CAA	* * * * *
A GCT	R AGA	PCCT	C TGC	7 8 8 8 1
c TGT	S	9 9	V GTA	7886
ာ အီဇင	င TGC	C TGT	R AGA	いいじょう
CIT	V GTC	DGAC	L TTA	ACA.
GGA	Q CAG	C TGC	R CGA	AATC
EGC CCT	GGA	r CGT	A GCT	AAG
ည္သစ္သ	E	Q CAG	H	PAAAC
r F	L TTG	F	Q CAG	ATATITICAAAATAAAGAAGAATCAATTICAAAAAAAAAA
GAC	L	I ATC	R CGG	TTCA
TIL	V GIC	E GAA	N AAT	ATAT

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79	16 140	36 200	56	76	96 380	116 440	136 500	156 560
ICTT	1 rg	V GTT	PCCA	T ACC	Y TAC	K AAG	GGA	E GAA
CTCCCTCTT	A M GCG ATG	S TCG	H CAC	Q CAG	E	R AGG	N AAT	TACT
TTC		N AAC	999	Y TAC	D GAT	C TGC	K AAA	I ATC
CTTTCTTT	T CTC	L TTG	A GCG	K AAG	TACT	A GCC	C TGC	T ACC
CI	V F GTC TTT	TACC	A GCT	N AAT	9 66C	CIC	m Y TAC	E GAA
\TTT	R 1 CGG G1	A GCC	9 667	GGG	C TGC	C TGT	N AAT	E GAG
GTCZ	T FACC CC	S AGC	299 9	9 9	E GAG	I ATC	G GGG	I ATT
GACG		V GTG	$_{ m CTG}$	P	E GAG	Q CAA	P	E GAA
TGGGGACCCAGGCTTGCAAAGTGACGGTCATTTT L G A A G A T R V CTG GGC GCA GCG GGC	GGA	P	Y TAC	D GAC	V GTG	$^{\mathrm{G}}$	G GGA	
		L CTG	P CCA	L CTG	E GAG	GGC	C TGC	R CGA
}GGCJ	A A GCA GO	L	P	I ATC	A GCA	A GCA	M ATG	F TTC
ACCCA)9)99 1 9	PCCT	$_{ m CTG}$	G GGA	C TGC	D GAC	A GCT	H CAT
3GGG7	L (CTG G(H CAC	N AAC	P CCG	P CCG	GGG	H CAC	N AAT
CGTO	A I GCT CJ	9 9	K AAG	A GCG	Y TAC	GGA (R CGT	Q CAA
GTT	1 7 1G GC	255 GGC	I ATC	A GCC	P CCG	R CGC	M ATG	D GAT
SCACO	1 M IG ATG	L	A GCT	S AGC	O CAG	TACC	C TGC	S TCT
99295	M 1G AT(A GCT	N AAC	V GTC	Y TAC	P	R CGC	s TCT
GTGG	CTG	A GCG	S TCC	A GCA	N AAC	S AGT	K AAA	V GTG
CCGGACGCGTGGGCGCCACGGTTTCG	M GAGTCCTTCTGAG ATG	A GCG	N AAT	S TCT	D GAC	A GCT	R CGA	$^{\mathrm{C}}$
ງ၅၁၁	GAGI	V GTA	CIC	9	I ATT	C TGC	R CGC	I ATA

FIG. 3B

176 620	196 680	216 740	236	256 860	267
S	A	E	R	N	
TCA	GCC	GAA	CGT	AAT	
S	C	K	Q	S	
TCT	TGT	AAA	CAG	AGT	
$_{ m L}$	D GAC	L CTG	${ m F}$	A GCC	
T	S	V	I	Q	
ACC	TCA	GTC	ATA	CAA	
T	S	P	E	H	
ACC	TCA	CCT	GAA	CAT	
R	R	K	L	H	
AGA	CGG	AAA	CTA	CAC	
R AGA	L	C TGT	G GGA	D GAT	
STCC	C TGT	I ATC	H CAT	K AAA	
$_{ m TAT}^{ m Y}$	V GTT	K AAG	S TCT	Q CAG	
	S	S	9	I	*
666	TCT		9	ATA	TAA
D GAT	GGT	W TGG	K AAA	R CGG	H
$_{ m L}$	E GAA	F	R AGA	C H@C	R AGA
T	Q	H	R	S	Q
ACC	CAA	CAC	AGG	TCT	CAG
S	G	R	H	$_{ m CTG}$	C
AGC	GGA	AGA	CAT		TGT
H	K	A	K	GGT	T
CAT	AAA	GCT	AAG		ACT
D	T	C	T	E	H
GAT	ACC	TGT	ACC	GAA	CAC
N	H	C	C	G	L
AAT	CAC	TGT	TGT	GGA	
GGT	Y TAT	$_{ m L}$	V GTG	$^{ m C}_{ m TGT}$	R AGG
\mathbf{F}	M ATG	G GGA	Q CAA	$^{ m Y}$	S TCT
S	K	S	G	C	S
AGC	AAA	TCA	GGT	TGT	TCT

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1525 1209 1288 1446 1130 1367 1051 CCTAAGGATATACAAGTTCTGTGGTTTCAGTTAAGCATTCCAATAACACCTTCCAAAAACCTGGAGTGTAAGAGCTTTG ATGAAACTTTTAATTTTTTTTTTTGTAAAGGTGCTGCACTGCCTATTTTTTCCTCTTGTTATGTAAATTTTTGTACACATTGA TTGTTATCTTGACTGACAAATATTCTATATTGAACTGAAGTAAATCATTTCAGCTTATAGTTCTTAAAAGCATAACCCT TTACCCCATTTNATTCTAGAGTCNAGAACGCAAGGATCTCTTGGAATGACAAATGATAGGTACCTAAAATGTAACATGA AAATACTAGCTTATTTTCTGAAATGTACTATCTTAATGCTTAAATTATATTTCCCTTTAGGCTGTGATAGTTTTTGAAA **ACCAGCTATCCAAAATGCAGTGAACTCCTTTTATATAATAGATGCTATGAAAACCTTTTATGACCTTCATCAACT** TTTCTTTATGGAACTCCCCTGTGATTGCAGTAAATTACTGTAATTGTAAATTCTCAGTGTGGGCACTTACCTGTAAATGCA

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Sean McCarthy Inventors:

9 180 240 100 120 360 140 420 160300 W TGG T ACC P $\frac{L}{TTG}$ GGA K AAG IGC ŋ × FTC I ATC D GAC K AAG C TGC CCC S AGT E GAA H CAT S TCT P H CAC H CAT R H CAT R CGT P N AAC G GGG Q CAA ICA C口 C T ACC S TCA A GCT K AAA GGA K AAA G CAA M ATG $_{
m L}$ $_{\rm TAC}^{\rm Y}$ I ATA $_{\mathrm{TGT}}^{\mathrm{C}}$ T ACC \times GGC I ATC H CAT H CAT C TGC A GCG CAC $_{\rm TGT}^{\rm C}$ S AGC ညည D GAT G GGT S TCA F TTT V GTC C TGT AGT E GAA H CAC G GGG R CGA M ATG E GAA Ω CAC T ACT H CAC N AAC K AAG E GAA GGG ပ H V GTT R CGA T ACT I ATT Q CAG $^{\rm C}$ R CGT Ö C TGC TAT H CAC R P CCA D GAT H CAT Q CAG AGG I ATC P CCA D GAC F TTC K AAG R AGA L K AAG CAC GTG $_{\rm TGT}$ R AGA S TCA Н Η > K AAA I ATC GGA V GTT S TCA R CGG P CCA ഥ AGG R AGA 9 96C TACT L CTA R CGA K AAA $\frac{L}{CTG}$ ACG R GGT N AAT $_{
m L}$ C TGC N AAT Ŋ G CGC Q CAG C TGC I ATC H CAT $_{\rm TGT}^{\rm C}$ N AAT D GAT \overline{W} TTC $^{\rm C}_{
m TGC}$ $_{
m L}$ P AAA S TCT V GTG × T ACC G A GCT E GAA M ATG R GGA D GAC

540 TGA I ATT AAA Q CAG $^{\rm C}_{
m TGT}$ V GTG H CAT $^{
m L}$ R AGA A GCC K AAA S TCC S TCC Y TAC TACC A GCC GAT K AAA w TGG

TCACCATTGAGGAACATCATCAATTGCAGACTGTGAAGTTGTGTATTTAATGCATTATAGCATGGTGGAAAATAAGGTT

698

480

AAA

CTG

299 299

AAG

GAC

IGC

ATT

GAA

999

Ω

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617

CAG

CAC

TCC

AGG

SSS

SSS

CCA

CTG

AAG

ATT

ATC

TGG

TTC

GCC

GTG

CGG

ည္သ

CAT

CIC

GAA

Title: Sean McCarthy Inventors:

137 41 197 257 317 61 81 101 377 121 437 497 141 557 181 161 CIC S AGC AAA S TCC CIC GAG CCC ACA П M H 闰 O) Д, H CTC GAG CTG GGC r CTC s TCC GTA CAC Н G 回 Н > Ħ Щ CTG CAA CGG ACC TTC ATC AAG TTC н Ø Ħ Ŀ 24 H K [zı ß CTG ည္ဟင္ CTG CIL TIC AAC TTG AGC П Ø н Н Ēų Z Н S ĸ CIG GAC CGA GAC AAC GTG GAC GAT ы Ω ĸ Ω Z > Ω Ω æ GTC GCT ATG වුදුල AGC GAG ACG GGT > K Σ S r E. G H 24 CTG GAT TTC CCC L CTG ည္ဟ GGA GAG П Д Ω ſΞį Ø Ö 旦 Д CTG CAT GGC ညည CAG AAG ACA TTC Ы A H O K Н H Œ CAT I CAA s TCT CAC AAG AGC CAG Н Ø 田 M S **O** K CGG CCT CIC GAG TIC AAC GGG ATC ĸ Д Н ſει 闰 z r Н H AGG GCT CTA L TTA Q CAG GAC GAG ညည Н ĸ ¥ Ω F щ Н GCA GCA AGC AGC AAC ACC GCG GTA K K S Ø K > z H 3 CCC CAG GCT GAC GAG ATG CCA CTG М Ω K Ø Н 回 Σ а Ŀ ည္ဟ TCC CTC ATA GAG AAG CAA ညည Ø ß П H Ø 回 K Ø ¥ CCT ည္သည GGC 399 GAC AAA ATT GAG Д Д G r Ω K 回 > CCA ATC ACA CGG ATC AAG CAC TCC Д H 4 H н н Ø M 24 GTG TCC CTC CTT TAC CAG GCA GAG Ø > H П Oi × Ø 团 Д CTG gcc GGT L CTG CIC GTG AAC GAG Н Н Ŋ z > 闰 Щ GAA ACC TTG AAC GGG CAC GTG ATG 闰 H Н z > Ö ш Σ H GGA TCT s TCC GGT AGG CCT AGC AAT r ល Ö Ø Z Д × 闰

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D GAT (₽ GCC	L HG	E GAG	ວອອ ວອອ ອ ອ		H	W TGG	CTC	SAGC	E G A G	K AAG	R CGA	H CAC	R CGC	L CTG	Q CAG	A GCC	I ATC	R CGG	201 677
D GAT	GGA	L CTC (H O	K AAG	უ ტეტ	K G T	H AC	K AAG	D GAC	v GTC	L CTA	E	e Gag	უ ე	T	EGAG	s AGC	S	S	221 737
H CAC	E-1	S R L rcc agg ctg 1	L CTG	S P TCC CCC	CCC	R CGA	K AAG	T ACC	H	L TTA	L CTG	Y TAC	I ATC	CIC	r Agg	မှ	S TCT	R CGG	Q CAG	241
L	* TAG																			2 4 3 803
GGI	ອອອອຸ	ACCG	GGGA	GCAC	CTGC	GGGTGGGGACCGGGGAGCACCTGCTGTAGCCCCCATCAGACCCTGCCCCAAGCACCATATGGAAATAAAGTTCTTTCT	AGCC	CCCA	TCAG	ACCC	TGCC	CCAA	GCAC	CATA	TGGA	AATA	AAGT	TCT	TCL	882
ACA	TCTA	AAAA	AAAA	AAAA	AAAA	Tacatctaaaaaaaaaaaaaaaaaaaaaaaaaaaattggcggccgc	AAAA	AAAT	TGGC	၁၁၅၅	ည								•	928

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FIG. 6A

crsp-2h crsp-3h crsp-4h tango59 Consensus	MQRLGATLLCLLLAAAVPTAPAPAPTATSAPVKPGPALSY	40
crsp-2h crsp-3h crsp-4h tango59 Consensus		80
crsp-2h crsp-3h crsp-4h tango59	ASSEVNLANLPPSYHNETNTDTNVGNNTIHVHREIHKITN	
Consensus	a n n v s	120
crsp-2h crsp-3h crsp-4h tango59 Consensus	PLGALVLDFNNIRSSADLHGARKGSQCLSDTDCNTRKFCL AVSAAPGILYPGGNKYQTIDNYQPYPCAEDEECGTDEYCA	160
crsp-2h crsp-3h crsp-4h tango59	QPRDEKPFCATCRGLRRRCQRDAMCCPGTLCVNDVC SPTRGGDAGVQICLACRKRRKRCMRHAMCCPGNYCKNGIC SPHQGSSACMVCRRKKKRCHRDGMCCPSTRCNNGIC FASFQYTCQPCRGQRMLCTRDSECCGDQLCVWGHC	200
Consensus crsp-2h crsp-3h crsp-4h	TTMEDATPILERQLDEQDGTHAEGTTGHPVQENQPKR VSSDQNHFRGEIXETI.TESFGNDHSTLDGYSRR IPVTESILTPHIPALDGTRHRDRNHGHYSNHDLGWQNL	200
tango59 Consensus		240
crsp-2h crsp-3h crsp-4h tango59 Consensus	KPSIKKSQGRKGQEGESCLRTFDCGPGLCCARHFWTKI TTLSSKMYHTKGQEGSVCLRSSDCASGLCCARHFWSKI GRPHTKMSHIKGHEGDPCLRSSDCIEGFCCARHFWTKIATRGSNGTICDNQRDCQPGLCCAFQRGLLFPV Km htKGqEG CLRssDC pGLCCARHFWtK I	280
Comsensus	rail Herradha Chusane bancevitti Metr. T	200

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FIG. 6B

crsp-2h ckpvllegovcsrrghkdtAQAPEIFORCDCGPG crsp-3h ckpvlkegovctkhrrkgshgleiforcycgeg crsp-4h ckpvlhQgevctkQrkkgshgleiforcDcAkg tango59 ctplpvegelchdpasrlldlitwelepdgaldrcpcasg
crsp-4h CKPVL HQ GEVCTK QRKKG SHGLEIFQRCDCA KG tango59 CTP LPV EGE L C HDPASRLLDLITWELEPDGALD RC P CA SG
tango59 CTPLPVEGELCHDPASRLLDLITWELEPDGALDRCPCASG
Consensus CKPVL EGqVCtk r Kg shglEIFQRCdCa G 320
*
crsp-2h LLCRSOLTSNRQHARLRVCOKIEKL
crsp-3h LSCRIQKDHHQASNSSRLHTCQRH
crsp-4h LSCKVWKD.ATYSSKARLHVCQKI
tango59 LLCQPHSHSLVYVCKPTFVGSRDQDGEILLPRE
Consensus LsCr gkds s aRLhVCQki 360
•
crsp-2h
crsp-3h
crsp-4h
tango59 VPDEYEVGSFMEEVRQELEDLERSLTEEMALREPAAAAAA
Consensus 400
crsp-2h
crsp-3h
crsp-4h
tango59 LLGREEI
Consensus 406

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Inventors:

FGTCGACCCACGCGTCCGCTGTGGCAGCCCAGCTACCGGTCGTGACCAGATCCAGCTTGCAGCTTTAGTTGTTCATTC

12 145	32	52 265	72 325	92 385	112 445	132 505	152 565	172 625
L	A GCG	R CGA	M ATG	P	H	V	DGAC	% CGG
T ACA	P CCG	F TTT	E	PCCT	v GTG	T ACA	E GAA	င TGC
C	TACT	MATG	E	L TTA	H	EGAG	D GAT	P CCA
r CTG	W	E	V GTG	S AGC	v GIC	S TCT	I ATT	O CAG
L TTG	TACT	NAAAT	A GCC	A GCA	T ACA	F TTT	I ATC	ဂ TGC
I ATT	V GTC	L	SAGT	L	N AAC	V GTC	c TGT	TACC
GGT	T Acg	T ACG	R CGC	N AAC	N AAT	v GTG	E GAA	Y TAC
უ ე	P	A GCT	L	V GTG	G GGA	O CAG	H	k Aag
CTC	S TCC	E	K AAA	e Gag	V GTG	G GGA	s Agc	F
ж С66	PCCT	e Gag	H	S TCT	R AGG	S AGT	R AGG	s AGC
O CAG	A GCT	Q CAG	O CAG	s TCC	T ACC	Q CAG	r Aag	S TCC
MATG	CCT	PCCT	TACT	T ACG	e Gag	N AAC	ဗ	F TTC
A.A.C	A GCT	Y TAC	DGAC	K AAA	ACG	N AAC	E	Q CAG
AACA	TACT	N AAC	GAA	A GCT	S AGC	T ACC	E GAA	င ၁၈၄
9929	P CCC	L	MATG	A GCT	T ACC	I ATA	D GAT	Y TAC
CAGC(V GTC	A GCT	L	A GCA	e Gag	K AAG	ა მემ	R AGG
၁၁၅၁	A GCG	PCCA	e Gag	E	N AAT	H	v GTA	TACC
3066	A	ဗ္ဗ	E GAG	E	H	V GTT	s TCT	PCCC
M GAATTGGGCGGCGGCCAGCGCGGAACAAAC ATG	A GCG	P CCG	V GTG	A GCG	Y TAT	E	T ACA	ზ
GAA	L CTG	E	E GAG	e gag	N AAC	Q CAG	I ATT	C TGT

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Inventors:

192 685	212 745	232 805	252 865	272 925	292 985	312 1045	332 1105
W TGG	R AGG	T ACA	I ATC	L	H CAT	ဗဗ္ဗ	M ATG
₩	O CAG 1	င် ၁၅	L CHC 2	L CTC O	S AGC C	V GTT G	E GAG A
c TGT	N AAC	V GTG	D GAT	ဗ ၁၅၅	7 ၁၅၅	D GAT (CAG C
L CTG	D GAC	P	L CTG	S AGT	V GTG	E GAA	₽
Q CAG	C TGT	F	L CTG	A	F	Y TAC	L CTA
D GAC	IATC	L CTG	o Cag	င TGC	A GCC	e Gag	s AGC
ය ශි යිබ	T	L	S AGC	P	P CCA	D GAT	R CGG
C TGT	ອອອ	ဗ္ဗ	TÀCC	င TGC	K AAG	P	e Gag
င 767	N AAT	R AGA	P CCC	R CGA	C TGC	₽	1 CTG
GAG	၁၅၅	CAA	D GAC	DGAC	MATG	E GAG	D GAC
S AGT	GGT	F TTC	H	L TTG	Y TAC	R AGG	GAA
GAC	K AAA	A GCC	C TGC	A GCT	V GTG	PCCC	L
R CGA	T ACC	C TGT	L	GGA	L	L CTG	E
ACC	A GCC	c TGT	EGAG	E	S AGT	Q CAG	Q CAG
င္သ	K AAG	L CTG	GGA	PCCT	H	S AGC	r CGC
L CTA	CAA	ဗ	E GAG	e Gag	s AGC	E GAĞ	V GTG
MATG	T ACC	PCCT	V GTG	L CTG	H	E GAG	GAA
CAG	C TGC	Q CAG	CCC	E	P CCA	S AGT	9 999
CAG	H	C TGC	L CTG	W	Q CAG	H CAC	I ATA
D GAC	G GGT	D GAT	P CCC	T ACC	c TGC	D GAC	FTTC

FIG. 8C

1238 350 1159 1317 1396 1475 1712 1554 1633 1870 1791 **AATGGCCGCAGCTCCTTCCCAGTAGCTTTTCCTCTGGCTTGACAAGGTACAGTGCAGTACATTTCTTCCAGCCGCCCTG** ttgttcttcatggatggaagatttgtttgaagggagggatgggaaggggtgaagtctgctcatgatggatttggggga TACAGGGAGGAGGATGCCTGCCTTGCAGACGTGGACTTGGCAAAATGTAACCTTTGCTTTTGTCTTGCGCCGCCCCCAT GGGCTGAGGCAGTGGCTACACAAGAGCTATGCTGCTCTGTGGCCTCCCACATATTCATCCTGTGTTTCAGCTCCTACC TCACTGTCAGCACAGCCCTTCATAGCCACGCCCCCTCTTGCTCACCACAGGCGAGGGGGACCAGAGGGGGACTTCTCT CCTTTGGTTTAATTATTTTCTCCTTCAAGGCACGCCTGCCACTAAGGTCAGGCTGACTTGCATGTCCCTCTAACGTTCG TAGCAGTGTGGTGGACACTGTCTTCCACCGACTGCTTCAATACCTCTGAAAGCCAGTGCTCGGAGTGCAGTTCGTGTAA TAG GAG GAG GAG ATT 回 回 GGA ည္ပမ္ GTG GAG TCA CTA Н ß ഥ > CCT GCC CCT Д K Д 999 Ö GAG 回 ĪΨ

App No.:

Inventors:

Title:

09/009,802

Sean McCarthy

Novel CRSP-2 Protein...

FIG. 8D

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Sean McCarthy Inventors: